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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/601,724 | 06/23/2003 | Leonard N. Schiff | 990134DIV | 8766 |

23696 7590 03/23/2007
QUALCOMM INCORPORATED
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| EXAMINER | |
|---|---|
| SHAH, CHIRAG G | |
| ART UNIT | PAPER NUMBER |
| 2616 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 03/23/2007 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/23/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/601,724 | SCHIFF, LEONARD N. | |
| | Examiner | Art Unit | |
| | Chirag G. Shah | 2616 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *23 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *19-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 19-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedeman et al (US 6,253,080), hereinafter '080 in view of Wiedeman (US 6,654,357), hereinafter '357.

Regarding 19, '080 discloses a method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building **[see, fig. 18, col. 7, lines 60 to col. 8, lines 35 and col. 27, lines 5-47]**, comprising the steps of:

acquiring a pilot signal prior to the user terminal entering the building **[see col. 34, lines 25-30, user terminals reports of acquiring pilot signals; and a mobile user 1106 which has been in contact with the system for some period of time and is registered as a mobile user at gateway suggest of acquiring pilot signals, see col. 8, lines 7-12]**;

placing the user terminal into a deep paging mode prior to the user terminal entering the building **[before the user moves indoors, the gateway embodied in the satellite interface unit or virtual gateway delivers a paging mode, messaging, low speed data to the mobile terminals, see col. 7, lines 60 to col. 8, lines 15]**;

tracking Doppler as the user terminal proceeds into the building **[see col. 27, lines 5-47, where the Doppler is tracked and corrected to compensate for motion of the satellite and**

**this corrected signal is applied for call alerting, paging, messaging, store and forwarding of data]**; and

'080 is silent to explicitly disclose of monitoring an auxiliary paging channel after activating said deep paging mode. '357 discloses of in col. 9, lines 66 to col. 10, lines 61 of the generating the sync channel that includes transmitting time of day, gateway identification, satellite ephemeris and assigned paging channel conveying a system parameter message including the configuration of the paging channel, registration parameters and parameters to aid in acquisition. The user requests access and monitors the forward link paging channel for the assignment of a Walsh code to the user terminal to establish a channel. This clearly suggests that the user terminal monitors the paging channel for acquisition, activation, configuration of the paging channel, registration parameters and parameters such as activation of page mode. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of '080 to include the features of monitoring the paging channel as taught by '357. One is motivated as such in order to enable a user terminal to receive sufficient signal strength to avoid having an ongoing call automatically terminated optimizing the user's typical coverage.

Regarding claim 20, '357 discloses in col. 10, lines 22-29 and 53-67 wherein paging channel messages transmitted over said auxiliary paging channel are combined with a Walsh sequence having a length greater than or equal to 128 chips.

Regarding claim 21, '357 discloses in col. 9, lines 66 to col. 10, lines 7, 22-29 and 53-67 further comprising the step of acquiring an auxiliary synchronization signal.

Regarding claim 22, '357 discloses in col. 9, lines 57-65 of further comprising the step of acquiring an auxiliary pilot signal.

Regarding claim 23, '357 discloses in col. 9, lines 66 to col. 10, lines 62 wherein paging channel messages transmitted over said auxiliary paging channel. The forward link paging channel known in the art are transmitted either at a data rate of less than 4800 bits per second or 2400bps or 9600 bps.

3. Claims 24-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedeman (US 6,654,357), hereinafter '357 in view of Wiedeman et al. (US 6,253,080), hereinafter '080.

Regarding claim 24, '357 discloses disclose the steps of:

receiving at the user terminal ephemeris messages transmitted from a gateway **[see col. 9, lines 57 to col. 10, lines 17, and 53-62, the user terminal receives ephemeris messages via paging channel from the gateway 18]**;

storing in the user terminal said ephemeris message **[see col. 13, lines 41-67 and col. 10, lines 1-17, the user terminal such as a hand held has stored the ephemeris location message in memory]**;

determining the location of the user terminal **[see col. 13, lines 41-67, the position location subsystem knows the user terminal location]**;

determining Doppler based on said location and said ephemeris messages stored in the user terminal **[the Doppler is determined and compensated for attenuation based on the location stored in the user terminal, see col. 13, lines 41 to col. 14, lines 62]**; and

acquiring a pilot signal **[see col. 9, lines 40-65, acquiring a pilot signal from one of the satellites]**.

'357 is silent as to disclose a method for compensating for the Doppler effect in a communication system where messages are transmitted at a low data rate to a user terminal that is inside a building. '080 discloses of compensating for the Doppler effect in a communication where messages are transmitted at a low data rate inside a building **[see, fig. 18, col. 7, lines 60 to col. 8, lines 35 and col. 27, lines 5-47]**. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of '357 to include the features of compensating for Doppler effect where messages are transmitted inside a building as taught by '080. One is motivated as such in order to enable a user terminal to receive sufficient signal strength to avoid having an ongoing call automatically terminated optimizing the user's typical coverage.

Regarding claim 25, '357 discloses in col. 13, lines 42-58 wherein said step of determining the location of the user terminal includes the step of storing [in a database 86] the location of the user terminal each time the user terminal registers with a gateway.

Regarding claim 26, '357 discloses in col. 13, lines 42-52 wherein said step of determining the location of the user terminal includes the step of receiving a global positioning system (GPS) signal.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7682. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cgs
March 7, 2007

CHIRAG G. SHAH
PRIMARY PATENT EXAMINER